



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/922,321	08/03/2001	Paul Joseph Berlowitz	CJB-0106	8067

27810 7590 10/28/2003

EXXONMOBIL RESEARCH AND ENGINEERING COMPANY
P.O. BOX 900
1545 ROUTE 22 EAST
ANNANDALE, NJ 08801-0900

EXAMINER

MEDLEY, MARGARET B

ART UNIT PAPER NUMBER

1714

DATE MAILED: 10/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/922,321		Applicant(s) BERLOWITZ ET AL.	
	Examiner Margaret B. Medley		Art Unit 1714	
	-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --			

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on 15 July 2003.

2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1,8-11,13 and 15-22 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 1,8-11,13 and 15-22 is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some * c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____. 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6) <input type="checkbox"/> Other: _____
--	--

DETAILED ACTION

The amendment dated July 15, 2003 has been entered of record

The pending claims of record are claims 1, 8-11, 13 and 19-22.

Claims 2-7, 12 and 14-18 were cancelled by the amendment dated December 4, 2002.

Claim 21 is objected to because of the following informalities: The "149⁰ C +" in line 1 of claim 21 (b) and the spelling of "point" in line 2 of claim 21 (e) should be corrected.. Appropriate correction is required.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 8-11, 13 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pedersen WO 00/12,654.

Pedersen teaches a F/T diesel fuel having $338^{\circ}\text{C} < \text{T90} < 538^{\circ}\text{C}$, page 9, lines 21-22, a sulfur and nitrogen content of desirably less than about 5 ppmw, bridging paragraph of pages 8-9, and page 12, lines 8-13 polyaromatics desirably less than 1.0 wt % page 9, lines 6-9, aromatics desirably 5 volume % or less, page 10, line 2 and cetane number of greater than 56, 57, 58, 59, 60 or higher, page 9, lines 13-15 and the use of the fuel in diesel engines, page 12, lines 18-29 and page 8, lines 3-6.

Pedersen is silent to the teachings to the cold filter plugging point (CFPP) of less than or equal to $+5^{\circ}\text{C}$.

It is the examiner's position that the fuel composition of Pedersen having the same T90 degree and other physical properties would inherently have the same CFPP as the fuel of the instant claims to render the instant claims obvious.

Claims 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pedersen WO 00/12,654 as applied to claims 1, 8-11, 13 and 19-20 above, and further in view of Derr 4,684,786.

Pedersen is silent to applicant's claimed second zone reaction and its catalyst. It would be obvious to the artisan in the art to use a second zone in the presence of a catalytic dewaxing catalyst in view of the teachings of Derr. Patentee Derr teaches and discloses processes for upgrading wax from F-T synthesis by hydro-cracking, dewaxing or by catalytic cracking in the presence of a catalyst, Figures 1-2, column 3, lines 24 to column 4, line 42, column 5, line 26 to column 6, line 51 wherein the products from

Art Unit: 1714

hydro-cracking of F-T Reactor wax have pour points of -130°C and -30°C , Table 5 of column 11. It would be obvious to the artisan in the art to further treat the F-T products of Pedersen with the process and catalyst of Derr to produce F-T products having low pour points and low cloud points. The combined teachings of the two conventional processes for F-T synthesis of Pedersen and Derr render obvious the instant claims. Both Pedersen and Derr teach that the instant claimed catalysts are well-known catalysts conventionally used for hydro-isomerization, hydro treating and dewaxing of Fisher-Tropsch fractions to produce F-T hydrocarbon distillates.

With respect to the added feature to claim 21, it is well-known known in the art as state of the art knowledge that mixtures of H_2 and CO are used to produce F-T synthesis gases.

Applicant's arguments filed July 15, 2003 have been fully considered but they are not persuasive.

Applicant alleges that Pedersen does not teach a CFPP through the catalytic dewaxing with a selective catalyst of the normal paraffin's to isoparaffins.

It is firstly pointed out that the said process step is only required in process claims 21 and 22. Secondly, Derr is relied on for said process step for producing a F-T hydrocarbon fraction as required by claims 21 and 22.

The examiner takes the position on record that Pedersen $< 1.5\text{ wt}\%$ polycyclic aromatic would encompass the instant claimed $< 0.1\text{ wt}\%$ polycyclic aromatics. Applicant has not established on record that the properties achieved in amended claim

Art Unit: 1714

21 is due to a H_2/CO ratio of 1.7/1. Nor is there any evidence discussed or presented showing unexpected results in a ratio of H_2/CO of 1.7/1 over a ratio of 1/1.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

The prior art cited but not applied further discloses F-T processes for hydro-isomerization and dewaxing in the presence of a catalyst of the same nature as that of the instant claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Margaret B. Medley whose telephone number is 703-308-2518. The examiner can normally be reached on Monday-Friday from 7:30 am to 6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 703-306-2777. The fax phone

Application/Control Number: 09/922,321

Page 6

Art Unit: 1714

number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

M. Medley/lap
October 20, 2003

Margaret B. Medley
MARGARET MEDLEY
PRIMARY EXAMINER